| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| 1 | Educational Directorate | $1^{ST}$ Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسى الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : - (A) choose the correct answer**

1- The bond in the sodium chloride molecule is ……………….

A - mono-covalent B - di-covalent C - tri-covalent D - ionic

1- A positive electric is gained when a rod of ………… which is rubbed with a piece of silk

A - Glass B - ebonite C - copper D - wood

**(B) : - First:- give reasons for the following**

1- The atom is electrically neutral in its normal state.

……………………………………………………………………………

2- Party balloons and blimps are filled with helium gas.

……………………………………………………………………………

**(B) : - Second :- What is the function of**

1-nitrogen gas

……………………………………………………………………………

2-Penicillium notatum fungus: -

……………………………………………………………………………

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**Second question : - (A)- Complete the following statements:**

1-……………… is called the blue planet while mars is called the …………… planet

2- The chemical symbol for ………………….. element is Ag , while S is The chemical symbol for ……………………

**(B) : - Compare between**

| P.O.C. | Dysentery disease | Typhoid disease |
|---|---|---|
| Causes microbe | | |
| Where the microbe is located | | |

==========================================

**Third Question : - (A) Choose the odd word and write what relation between the rest of the words:**

1- Elastic forces - Collision forces - Gravitational forces - Frictional forces.

.................................................................................................................

2- Iron - Copper - Nickel – Cobalt.

.................................................................................................................

**(B) : - First What happen If ...?**

1- Transferring an object from the moon's surface to the Earth's surface relative to its mass.

.................................................................................................................

2- Electrolysis of acidified water

.................................................................................................................

**(B) : - Second:-what is meant by.....?**

1- Atomic number

.................................................................................................................

2- Cellular respiration

.................................................................................................................

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**Forth Question : - (A)- Correct the underlined Items:**

1- Element (X) has a nucleus containing 39 nucleons and the number of neutral particles is (20), so it has an atomic number of __20.__ ( ................................................................ )

2-__Electroscope__ is a device that measured the weak electric charge. ( ................................................................ )

**(B) : - first Mention the importance of each of:**

1-nitrogen gas:

.................................................................................................................

2-Stainless steel alloy:

.................................................................................................................

**(B):-second :The following figure shows some living organisms**

a) What is the type of this living organism?

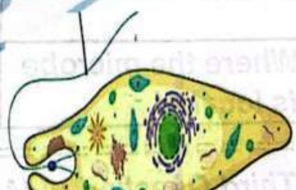
.................................................................................

b) What is the name of this living organism?

.................................................................................

c) How does this organism move?

.................................................................................



| | | | |
|---|---|---|---|
| **Model Exam** 2 | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسى الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : - (A)- choose the correct answer**

1- The Atomic number of an alkali metal in the third period is ........

a. 3 b. 9 c. 11 d. 19

2- An object of mass 500 gm, so its weight on Earth's surface equals ............ newton

a) 5 N b) 50 N c) 40 N d) 50 Kg

**(B) : - First:- give reasons for the following**

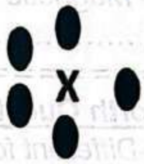
1- Bacteria are different from Euglena even though they are unicellular organisms.

.......................................................................................................

2- Occurrence of total lunar eclipse.

.......................................................................................................

**(B) : -Second :- The opposite figure represents the electrons of the outer shell for an atom that lies in period 3 in the modern periodic table according to Lewis's rule. Find!**




1- atomic number =........................................

2- atomic number for the element preceding it directly in the same group.=..........................................................

==========================================

**Second question : - (A)- Complete the following statements:**

1- The number of planets that have a crust .......................................... While the number of planets that do not have active volcanoes

2- The period starts with elements of group ..................................... and is end by the elements of group

**(B) : - Compare between**

| | | |
|---|---|---|
| |  |  |
| **Organism name** | | |
| **Classification** | | |

==========================================

**Third Question : - (A)- Choose the odd word and write what relation between the rest of the words:**

1- Mercury - Mars - Earth - Saturn.

..........................................................................................

2- White blood cells - Red blood cells - Stem cells - Nerve cells.

..........................................................................................

**(B) : -First What happen if ...?**

1- 1- Rubbing two ebonite rods with a piece of silk and bringing them close together.

..........................................................................................

2- Eating food and water contaminated with Salmonella typhi

..........................................................................................

**(B) : -Second:-what is meant by.....?**

1- Mass number

..........................................................................................

2- Magnetic field

..........................................................................................

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**Forth Question : - (A)- Write the scientific term:**

1-Different forms from elements having the same atomic number and different atomic masses (..............................)

2-Arranging some substances according to how easily they lose electrons. (..............................)

**(B) : -First Mention one example of each Of the following:**

1-The simplest molecule of an organic compound. (..................)

2-Unicellular organism eukaryotes (..................)

**(B) : -second :** Arrange the phases of the moon in ascending order according to the area of the dark part of the moon's face:

(first crescent - the full moon - waxing gibbous - waning gibbous - new moon)

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| Model Exam 3 | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : - (A) choose the correct answer**

1- The ratio between the mass of an object at the base of a mountain to its mass at its top is …………… one

a) more than b) Less than c) Equal to d) Double

2- The number of electrons in outermost energy level of the oxygen ion ($_8O$) is ……………. electron

a. 8 b. 7 c. 9 d. 10

**(B) : -First:- give reasons for the following**

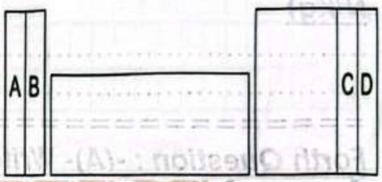
1- Compass box is made of copper or plastic and not of iron.

……………………………………………………………………………

2- - In plants, the role of phloem tissue is the opposite of the role of Xylem tissue.

……………………………………………………………………………

**(B) : -Second :- The following figure illustrates some groups of the periodic table:**




1- the elements of group (C) called …………

2- the valance of elements of group (B) is and group ( D) is ……………

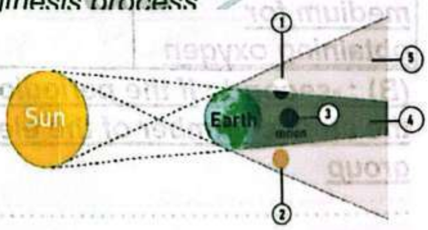
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**Second question : -(A)- Complete the following statements:**

1- Water can be separated into its components using a device called ……………

2-Light energy is converted into ……………. energy stored in …………….. material in the photosynthesis process

**(B) : -From the following figure:**




1- What is the name of area 4 and 5?

…………………………………………

…………………………………………

2- What is the name of the phenomenon that occurs to the moon in position 1 and 3?

.................................................................................................

==========================================

**Third Question : -(A) Choose the odd word and write what relation between the rests of the words:**

1- Cell membrane - Chloroplast - Centrosome - Golgi apparatus (.................................)

2- Fe - Na - C - K (.................................)

**(B) : -First What happen ...?**

1- When a magnet is suspended freely from its center

.................................................................................................

2- to the atomic size or radius increases for alkali metals according to melting and boiling point

.................................................................................................

**(B) : -Second:- An object that's mass on earth is equal to 6 kg. Calculate its weight on the earth's surface and on the moon if the gravitational field strength on the Earth's surface is (10 N/Kg)**

.................................................................................................

.................................................................................................

==========================================

**Forth Question : -(A)- Write the scientific term:**

1- A semi-metal used in the manufacture of electronic chips.( ........ )

2- The phase of the moon following the crescent. ( ...................... )

**(B) : -Compare between:**

| P.O.C. | fish | insects | amphibian |
|---|---|---|---|
| Respiratory organ | | | |
| medium for obtaining oxygen | | | |

**(B) : -second : If the periodic number of element (X) is 5 find the atomic number of the element that follows in period and group**

.................................................................................................

.................................................................................................

| Model Exam ֍ 4 ֍ | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1[ST] Term January 2026 | توجيه عام العلوم لغات |
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| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- The element, whose atomic number is (9) is similar in its chemical properties as the element whose atomic number is.........

a. 5 b. 7 c. 17 d. 19

2- The time it takes the moon to rotate around the Earth is .......... the time it rotates around its axis.

a) greater than b) less than c) equal to d) half

**(B) : -First:- give reasons for the following**

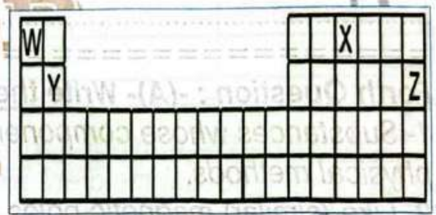
1- The electrostatic plating method is preferred for metal plating.

.................................................................................................

2- Ionic compounds are neutral charge.

.................................................................................................

**(B) : -Second :- The following figure represents a section in the periodic table:**




**1-Write the letter that represents**

a) Alkaline Earth metals ..................

b) Inert gas ..................................

2- Find the atomic number of element (X). ( ...................................)

====================================

**Second question : -(A)- Complete the following statements:**

1. Carbon dioxide + water + sunlight ⟶ .......... + ..........

2- The measuring unit of weight is ............., while the measuring unit of Mass is .............................................

**(B) : -Mention the benefit of each one of the following:**

1-Chloroplasts

.................................................................................................

.................................................................................................

2. Vitamin (D)

.................................................................................................

.................................................................................................

==========================================

**Third Question : -(A)- Choose the odd word and write what relation between the rests of the words:**

1- $_{11}Na$ - $_{17}Cl$ - $_{10}Ne$ - $_{18}Ar$ ( ................................ )

2- Bacteria - Euglena - Paramecium - Amoeba ( ......................... )

**(B) : -First What happen when ...?**

1- The Moon is in the new moon or full moon phase

...........................................................................................................

2- A magnet is divided into several pieces.

...........................................................................................................

**(B) : -Second:- A patient is suffering from high fever accompanied by flatulence and stomach pain with a headache:**

(1) What disease is this patient suffering from?

...........................................................................................................

(2) what is the name and classification of the microbe causing this disease?

...........................................................................................................

==========================================

**Forth Question : -(A)- Write the scientific term:**

1- Substances whose components cannot be separated by the physical methods. ( ................................ )

2- Like (similar) magnetic poles repel each other and Unlike (different) magnetic poles attract each other. ( ............................ )

**B – first Look at the opposite figure, then answer:**



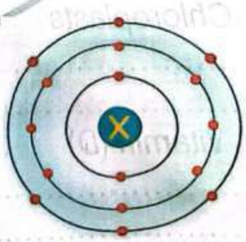

1-The device is ..................................................

2-This device is used to ....................................

...........................................................................

**second : The following figure shows the electronic configuration of element (X).**

**Determine:**




a-The atomic number ........................................

b-Place of element in the periodic table

...........................................................................

c-the atomic number of element that proceeds in same group ................................................

| Model Exam ❀ 5 ❀ | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | $1^{ST}$ Term January 2026 | توجيه عام العلوم لغات |
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| | ((الاجابة في نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- When the moon enters the region of the ......... it is not an eclipse.

a. moon's shadow  b. Earth's shadow

c. Earth's penumbra  d. moon's penumbra

2- Block .................. contains most types of elements.

a) S  b) P  c) d  d) f

**(B) : -First:- What is meant ...?**

1- Covalent bond.

........................................................................................................

2- Law of attraction and repulsion.

........................................................................................................

**(B) : -Second :- compare between :**

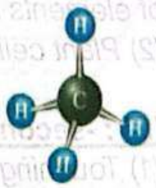
| P.O.C | Amoeba | Euglena | Paramecium |
|---|---|---|---|
| Means of Movement | | | |

**Second question : -(A)- Complete the following statements:**

1. .................. element helps to make the plant leaves green. While .................. element is necessary for strengthen roots of plants.

2- The moon orbits the Earth from ..................to ..............

**(B) : -first :The figure represents a molecule of a compound:**




(1) What type of bonds are present in this molecule?

........................................................................................

(2) What is the name of this compound?

........................................................................................

**(B) : -Second:- What is the result of each of the following**

(1) Not keeping yogurt in the fridge.

........................................................................................................

(2) Moving upwards from the surface of the Earth. (in terms of mass and weight).

........................................................................................................

| Model Exam ❀ 5 ❀ | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
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| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- When the moon enters the region of the ......... it is not an eclipse.

a. moon's shadow  b. Earth's shadow

c. Earth's penumbra  d. moon's penumbra

2- Block .................. contains most types of elements.

a) S  b) P  c) d  d) f

**(B) : -First:- What is meant ...?**

1- Covalent bond.

.....................................................................................................

2- Law of attraction and repulsion.

.....................................................................................................

**(B) : -Second :- compare between :**

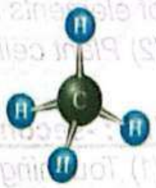
| P.O.C | Amoeba | Euglena | Paramecium |
|---|---|---|---|
| Means of Movement | | | |

**Second question : -(A)- Complete the following statements:**

1. ................. element helps to make the plant leaves green. While .................... element is necessary for strengthen roots of plants.

2- The moon orbits the Earth from .................to ..............

**(B) : -first :The figure represents a molecule of a compound:**




(1) What type of bonds are present in this molecule?

.....................................................................................

(2) What is the name of this compound?

.....................................................................................

**(B) : -Second:- What is the result of each of the following**

(1) Not keeping yogurt in the fridge.

.....................................................................................................

(2) Moving upwards from the surface of the Earth. (in terms of mass and weight).

.....................................................................................................

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**Third Question: -(A)- Choose the odd word and write what relation between the rests of the words:**

1- Saturn / Venus / Jupiter / Neptune. (.................................)

2- Protons / ions / Electrons / Neutrons. (.................................)

**(B) : -First What happen ...?**

1- If you heat red mercury oxide compound?

..........................................................................................................

2-If we dip a sunflower leaf in lemon juice?

..........................................................................................................

**(B) : -Second:- A body weighs 600 N at the base of Mount Everest.** Calculate its mass at its top. [Note: Earth's gravitational field intensity = 10 N/k]

..........................................................................................................

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**Forth Question : -(A)- Write the scientific term:**

(1) A table in which elements are arranged ascending according to their atomic masses. (.................................)

(2) The rotation of any object in space around another central object in a curved path due to the gravitational force between them. (.................................)

**(B) : -first :- Correct the underlined words:**

(1) The number of elements in period 2 is <u>greater than</u> the number of elements in period 3 in the periodic table. ( ............................ )

(2) Plant cells and bacterial cells both contain <u>chloroplasts</u>. ( ............................ )

**(B) : -second : State one result for each of the following:**

(1) Touching a neutral electroscope with a charged rod.

..........................................................................................................

(2) Adding a spoonful of sugar to a salt solution used for pickling olives.

..........................................................................................................

(3) The Earth aligning in a straight line with the moon and the sun.

..........................................................................................................

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | $1^{ST}$ Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادي | | |
| 6 | ((الاجابة في نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- An element's outermost energy level (L) contains a number of electrons equal to the number of electrons in the level (K), so its Atomic number is ..............

a.4 b.6 c.8 d.12

2- All the following are field forces, except .....................

(a) electrostatic forces. (b) magnetic forces.

(c) gravitational forces. (d) collision forces.

**(B) : -First:- from the opposite figure ...?**




1- What is the atomic Number of this ion?

...........................................................................................

2- What is the atomic number of the element that precedes it in the same group?

...........................................................................................

**(B) : -Second :- Give reasons:**

1-The atomic number equals the mass number for hydrogen.

...........................................................................................

2-Leaving bean plant roots in the soil after harvesting the crop.

...........................................................................................

=========================================

**Second question : -(A)- Complete the following statements:**

(1) The element $_{19}K$ is located in period ........... and group .............

(2) The only liquid nonmetal is ...... while the only liquid metal is ......

(3)The atmosphere of the planet ........................ contains methane, while the atmosphere of the planet ....................... contains oxygen.

**(B) : -first :in the opposite figure:**



1- What is the name of the bacteria?........................

2- What is the name of the disease caused by the bacteria shown in the figure? ..................................

**(B) : -Second:- Compare between : - photosynthesis process and cellular respiration (in two points only).**

.............................................................................................

.............................................................................................

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**Third Question : -(A)- put ( √ ) or ( × )**

1- A repulsive force arises between a magnet and some materials. ( )

2-The modem periodic table contains 11 gaseous elements.( )

3-The apparent height of the Sun is the lowest in winter. ( )

**(B) : -first:-State the name of each of the following:**

(1) The molecule formed by the combination of three oxygen atoms.

.............................................................................................

(2) Device used in determining the type of electric charge of a charged object.

.............................................................................................

(3) Parties whose mass can be neglected while their charge can't.

.............................................................................................

**(B) : -Second:- What is the scientific basis for classifying elements in the Modern periodic table?**

.............................................................................................

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**Forth Question : -(A)- Write the scientific term:**

(1) Living organisms whose genetic material is surrounding with nuclear membrane. (................................)

(2) The organ that gets rid of excess water, mineral salts and urea in the form of urine. (................................)

(3) Living organisms whose genetic material is surrounding with nuclear membrane. (................................)

**(B) : -first :- If an object weighs 50 newton , its mass on the moon's surface equals**(Knowing that the gravitational field strength on the Earth's surface is 10 N/kg.)

.............................................................................................

.............................................................................................

**(B) : -second : Mention the properties of ionic compounds.**

.............................................................................................

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
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| 7 | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- Leaves of plant are drooping and dangling when you touch them.

a. gazania b. mimosa c. sunflower d. cotton

2- Black holes are formed when a ..... collapses at the end of its life.

a. moon b. plants c. stars d. galaxies

3-number of groups which characterized by symbol (A) in the modern periodic table is ..................

a. 2 b. 6 c. 7 d. 8

**(B) : -First:- Mention one use for each of the following:**

(1) lightening rod .

..............................................................................................

(2) lactic acid bacteria .

..............................................................................................

**(B) : -Second :- Give reasons:**

1-Energy level (L) is saturated with 8 electrons.

..............................................................................................

2-Leaving bean plant roots in the soil after harvesting the crop.

..............................................................................................

==================================

**Second question : -(A)- Complete the following statements:**

(1) ........... cells differentiate into ............... cells found in the brain.

(2) Examples of protozoa include ................ and ..................

**(B) : -first : The opposite figure shows a section of the modern periodic table:**




1-What is the atomic number of elements (A) and (Y)? ..........................................................

2-What is the valance of (X)?

..........................................................................

**(B) : -Second:- Illustrate with drawing:**

(1) Magnetic field lines between two similar poles of different magnets.

..............................................................................................

(2) Covalent bonding in a water molecule using Lewis structure.

..............................................................................................

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**Third Question : -(A)- Choose the odd word and write what relation between the rests of the words**

1- Yeast fungus - Mushroom fungus - Bread mold fungus - Penicillium fungus.

..............................................................................................

2- Group 2A - Group 3A- Group 4A - Group 5A

..............................................................................................

3-F1uoine - Chlorine - Copper - Bromine

..............................................................................................

**(B) : -first:-What physical quantities are measured by the following units:**

(1)N/kg (.............................................)

(2)Coulomb (.............................................)

**(B) : -Second: What happen**

1-A charged object touches the disk of a electroscope.

..............................................................................................

2- Absence of stomata in plant leaves.

..............................................................................................

=====================================

**Forth Question : -(A)- Write the scientific term:**

(1) The physical property used to distinguish between water and honey in terms of flow resistance. (.............................)

(2) The regions in which electrons orbit around the nucleus of an atom. (.............................)

**(B) : -first :- compere between**

| P.O.C. | Mars | Jupiter |
|---|---|---|
| Crust | | |
| Atmosphere | | |

**(B) : -second : Mention the properties of ionic compounds.**

..............................................................................................

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | $1^{ST}$ Term January 2026 | توجيه عام العلوم لغات |
| 8 | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- Elements of block (d) are known as.................... elements

a. inert   b. transition   c. lanthanides   d. actinides

2- ..... .............is considered the closest celestial body to the Earth

A-Venus   B-Mars   C-Moon   D-Sun

3- Element has the atomic number (15) is similar in the chemical properties of the element has the atomic number ..............

a. 5   b. 7   c. 17   d. 19

**(B) : -First:- Mention one use for each of the following:**

(1) Aerogel. ....................................................

..........................................................................

(2) Stainless steel alloy. ....................................................

..........................................................................

**(B) : -Second :- Give reasons:**

1-Adding a small amount of pro-prepared yogurt to milk when making yogurt. ....................................................

..........................................................................

2-When the metallic ion loses an electron, it turns into a positive ion. ..........

..........................................................................

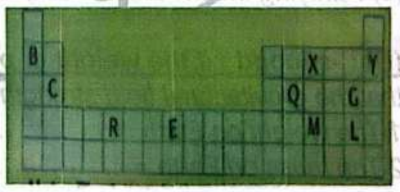
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**Second question : -(A)- Complete the following statements:**

(1) Living Organisms are classified into .............. and..................... depend on their nucleus.

(2) The atomic radius of lithium ($_3Li$) atom is ................. than that of sodium ($_{11}Na$).

**(B) : -first : The following figure represents a section in the modern periodic table. Select the letter which indicates**




(1) An element of alkali metals ..............

(2) Halogen ..........................................

(3) transition element ..............................

(4) element of atomic number 14 is .......

**(B) : -Second:- what is meant by :**

(1) orbital motion .

..........................................................................

==========================================

**Third Question : -(A) Mark (√) or (×) for each statement, with correction:**

(1) The number of protons and neutrons in an atom indicates its electrically neutral. ( ............................................................ )

(2) A total lunar eclipse occurs when the moon is in Earth's penumbra. ( ............................................................ )

(3) NPK fertilizer contains sodium, potassium and nitrogen. ( ............................................................ )

**(B) : -first:-Complete:** The gravitational force of the Earth to the Moon is ............ than the attraction force of the Moon to the Earth.

(Explain your answer):




............................................................................................................

**(B) : -Second: What happen**

1-if the box of compass is made of iron .

............................................................................................................

2- The presence of methane gas among the components of the atmosphere of the planet Uranus.

............................................................................................................

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**Forth Question : -(A)- Write the scientific term:**

(1) An imaginary line that passes through the earth from the north pole to the south pole passing through the center of the earth.( ......................... )

(2) Cells specialized in opening and closing the stomata in plant leaves. ( ......................... )

**(B) : -first :- Name the device used in the following:**

(1) Electrolyzing water into its elements. ( ......................... )

(2) Determining the type of electric charge of a charged object. ( ......................... )

(3) Purifying the blood of kidney failure patients from toxins. ( ......................... )

**(B) : -second : if the weight of person on moon is 80N find** (Knowing that the gravitational field strength on the Earth's surface is 10 N/kg.)

1-The weight on Earth = ........................................

2-The mass on Earth = ..........................................

| Model Exam 9 | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- Paramecium and bacteria are similar in that both are .

a) multicellular b) unicellular C) prokaryotes d) eukaryotes

2- An element located in the third period and group 5A has an atomic number of .

a)5 b)8 c)13 d)15

**(B) : -First:- Write the electronic configuration for the following elements, then determine their location in the modern periodic table:**

1- $_{10}Ne$ ..........................................................................

2- $_{20}Ca$ ..........................................................................

**(B) : -Second :- Give reasons:**

1- The mass number is often greater than the atomic number.

..........................................................................

2- The difference in the angle at which sunlight falls on different areas of Earths surface

..........................................................................

3-Bacteria differ from amoebas although both are unicellular organisms.

..........................................................................

==================================

**Second question : -(A)- Complete the following statements:**

1- The oxygen molecule $O_2$ is an example of .............................. molecule, while methane $CH_4$ is an example of .............................. molecule.

2-Yogurt bacteria convert .............................. sugar in the milk into .............................. which gives yogurt its distinctive taste and texture.

**(B) : -first : Element (X) locates in the third period and the alkali group, and the element (Y) locates in the third period and halogens group .Mention :**

1) The atomic number for (X) and (Y)

..........................................................................

2) Type of the bond produce from their combination

..........................................................................

**(B) : -Second :-Mention one use for each of the following:**

1- Aluminum titanium alloy: ..........................................................................

2 - Electroscope: ..........................................................................................

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**Third Question : -(A)- Mark (√) or (×) for each statement, with correction:**

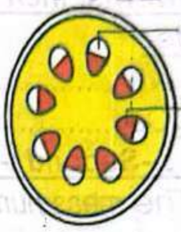
(1) Helium is a flammable gas used to fill balloons.

..........................................................................................................

(2) A person's weight on the Moon is greater than their weight on Earth

..........................................................................................................

**(B) : -first:- The opposite figure represents a section of a part of a plant:**




(1) Which part of the plant does the figure represent? ..........................................................

(2) Replace (X) and (Y) with the appropriate data.

..........................................................................................

**(B) : -Second: What happen**

1- A sodium atom (11Na) loses an electron from its outermost energy level.

..........................................................................................................

2-The human body lacks vitamin D.

..........................................................................................................

====================================

**Forth Question : -(A)- Write the scientific term:**

(1) The simplest pure form of matter that cannot be separated into components by physical or chemical methods.( ............................ )

(2) They are undifferentiated cells that have the ability to transform into all differentiated cells of the body. ( ............................................ )

**(B) : -first :- Write two properties of electric field lines.:**

(1) ......................................................................................................

(2) ......................................................................................................

**(B) : -second : Mention one importance for each of the following:**

1-Tide: ......................................................................................................

2 -Penicillium roqueforti fungus: .............................................................

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1st Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| 10 | ((الاجابة في نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer**

1- Which of the following is considered a field force?

a) Friction b) Collision c) Magnetism d) Elasticity

2- The element .......... is symbolized by the symbol Pb.

a) potassium b) barium c) phosphors d) lead

**(B) : -First:- The following figure is for one of the periods of the modern periodic table.**

| | L | | | | | | |
|---|---|---|---|---|---|---|---|
| X | $_{12}Mg$ | Al | Si | P | Y | Z | $_{18}Ar$ |

A- Locate the position of element (X) and (Y) in the periodic table.

..............................................................................................

B- Mention the kind of elements (X) and (Z).

..............................................................................................

C- The atomic number of elements (L). ( .................................... )

**(B) : -Second :- Give reasons:**

1- Organic compounds are known as carbon compounds.

..............................................................................................

2- Paramecium is considered a eukaryote.

..............................................................................................

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**Second question : -(A)- Complete the following statements:**

1- The valency of alkaline earth metals is .................................. while the valency of halogens is ..................................

2- The mathematical relation .................................. determines the number of electrons in the main energy levels.

**(B) : -first : Classify the following living organisms according to what you have studied, then mention the similarities between them:** 1- Bacteria 2-Euglena

..............................................................................................

..............................................................................................

..............................................................................................

**(B) : -Second: A body has a mass of 100kg on Earth .Calculate:**

(1) Its mass on the Moon: ..........................................................

(2) Its weight on Earth, given that the gravitational field strength Is 10 N/kg.

..........................................................................................

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**Third Question : -(A)- cross out the odd word:**

(1) Cell wall - Chloroplast - Centrosome - Golgi apparatus.

(2) White blood cells - Red blood cells - Stem cells - Nerve cells

**(B) : -first:-The opposite figure represents an living organism :**



1- What is the name of this living organism?

..........................................................

2- What is the classification of this living organism? ..........................................

**(B) : -Second: What happen**

1- A part of the moon enters Earth's shadow.

..........................................................................................

2- The atomic number increases within the same group (regarding atomic radius).

..........................................................................................

==========================================

**Forth Question : -(A)- Write the scientific term:**

(1) Homogeneous mixtures. ( ...................................... )

(2) Living organisms whose genetic material is surrounding with nuclear membrane. ( ...................................... )

**(B) : -first :- Correct the underlined words:**

(1) Amoeba moves using a **flagellum**. ( ...................................... )

(2) Magnetic forces are **contact** forces.( ...................................... )

(3) Plant cells and bacterial cells both contain **chloroplasts**. ( ...................................... )

**(B) : -second : An element with a mass number of 40 and 20 neutrons in its nucleus. Determine:**

1- The number of occupied energy levels in the atom. ( ............... )

2- The number of electrons in the outermost energy level. ( ........... )

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| ❀ 11 ❀ | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer:**

1- Element $^{23}_{11}Na$ is located in ...................... of the periodic table

A- first period and third group B- third period and first group

C- second period and third group D- second period and fourth group

2- ........................ is considered a pure substance that cannot be analyzed into simpler substances.

A- element B- mixture C- solution D- compound

**(B)- Give reasons for the following:**

1- The bond in the oxygen molecule is double covalent.

..........................................................................................

2- The nucleus of the atom is positively charged.

..........................................................................................

3- Body weight changes from one planet to another.

..........................................................................................

4- Ricfort cheese is characterized by its green color and distinctive taste.

..........................................................................................

==========================================

**Second question : -(A)- Complete the following statements:**

1- ........................................ Magnetic poles repel each other, while different magnetic poles ............................ each other.

2- Night and day alternate due to the Earth's rotation around ........................................ while the seasons alternate due to the Earth's rotation around ..........................................................

**(B)- Mention the importance of each:**

1- Helium gas.

..........................................................................................

2- Vitamin D.

..........................................................................................

3- Tides.

..........................................................................................

4- Gills.

.................................................................................................

**Third Question : -(A)- Correct the underlined words:**

1- Element (X) has a nucleus containing 39 nucleons and the number of neutral particles is (20), so it has an atomic number of <u>20</u>. ( .............. )

2- The melting point of ionic compounds is <u>low</u>. ( .............. )

**(B)- What happens if:**

1- A charged object touches the disk of an electroscope.

.................................................................................................

2- Adding a spoonful of sugar to the brine used to make pickles

.................................................................................................

3- Absence of stomata in plant leaves.

.................................................................................................

4- The moon is completely in the Earth's penumbra.

.................................................................................................

**Forth Question : -(A)- Choose the odd word, then write the relationship between the rest of the words:**

1- Magnetic needle - horseshoe magnet - magnetic stone - magnetic bar.

.................................................................................................

2- Fluorine - Chlorine - Copper - Bromine .

.................................................................................................

**(B)- Compare between : -**

| P.O.C. | Paramecium | Bacteria |
|---|---|---|
| Similarity | | |
| Difference | | |

| P.O.C. | Earth planet | Neptune planet |
|---|---|---|
| Crust | | |
| Volcanic activity | | |

| Model Exam ❁ 12 ❁ | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1[ST] Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer:-**

1-Which two elements have the same chemical properties .............

a) $^{39}_{19}K$ and $^{12}_{6}C$ b) $^{30}_{15}P$ and $^{23}_{11}Na$ c) $^{14}_{7}N$ and $^{28}_{14}Si$ d) $^{39}_{19}K$ and $^{7}_{3}Li$

2- Element (X) has a nucleus that contains 21 neutral particles and 41 nucleons so its symbol is ...................

a) $^{41}_{22}X$ b) $^{41}_{19}X$ c) $^{22}_{41}X$ d) $^{22}_{21}X$

**(B):-(1) What is the** period number in which the d – block starts? what name is given to most of its elements?

Period number ................. name ....................

**(B):-(2) State with explanation**, What the figures 1 ,2 represent :

...........................................................................

...........................................................................

...........................................................................



(1) (2)

**(B):-(3) What is the type** of charge formed on each of apiece of synthetic leather and a wooden rod when rubbed together? Explain.

.................................................................................................................

**(B):-(4) What is the** scientist Alexander Fleming discovered and what is used.

.................................................................................................................

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**Second question:-Write the scientific term of the following:-**

1- The force that causes a ball to fall from a high position to Earth's surface. ( ........................................................ )

2-Month in which the day length can reach 13 hours and 40 minutes. ( ........................................................ )

**(B):-(1) Give on function of:**

1- Stainless steel alloy. ( ........................................................................ )

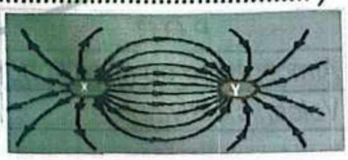
2- Aluminum – titanium alloy. ( ........................................................................ )

**(B):-(2) In the opposite shape:**

What is the type of charges X and Y

(X) is ............................................

(Y) is ............................................



**(B):-(3) Write the equation** that represents the cellular respiration process in eukaryotic cells.

.......................................................................................................

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**Third question:-(A)-** Four elements A is alkali metal , B is from 6A group and D is halogen. - **Complete:**

1- molecular formula A with B .................... the type of bond is .................

2- molecular formula B with D .................... the type of bond is .................

**(B):-(1) What is meant by** the magnetic field.

.......................................................................................................

**(B):-(2) Compare between** Xylem and phloem tissue according to their function

a) Xylem .......................................................................................

b) phloem tissue ..............................................................................

**(B):-(2) in the following figure:**



1- What is the name of the region where the moon is located ........................

2- What is the phenomenon is represented by the figure ......................................................................................

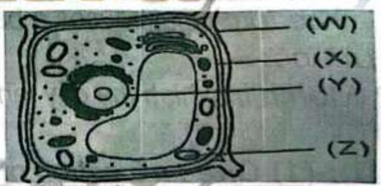
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**Fourth question : - (A)- Cross odd word and write the scientific term of the other:**

1-nickel / iron / cobalt / aluminum. ( ...................................................... )

2- Gravitational force / frictional force / magnetic force / electrostatic force. ( ...................................................... )

**(B):-(1) From the following shape Label:**




W: ..............................................................

X: ..............................................................

Y: ..............................................................

Z: ..............................................................

**2) Compare between Mercury and Earth in terms of:-**

a) Atmospheric composition b) Volcanic activity

| P.O.C | Venus | Earth |
| --- | --- | --- |
| Atmospheric composition | | |
| Volcanic activity | | |

| Model Exam 13 | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1st Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer:**

1- Elements of alkai metal are ......................

A- monovalent B- divalent C- trivalent D- quaternary

2- The bond in the sodium chloride molecule is ......................

A- mono-covalent B- di-covalent C- tri-covalent D- ionic

**(B)- Give reasons for the following:**

1- The atom is electrically neutral in its normal state.

......................................................................................................

2- Party balloons and blimps are filled with helium gas.

......................................................................................................

3- The mass of a body does not change from place to another.

......................................................................................................

4- Bean plants are autotrophs.

......................................................................................................

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**Second question : -(A)- Complete the following statements:**

1- Magnetic field lines start from the .................................. pole of the magnet and end at the .............................. pole.

2- The nearest inner planets to the sun are .............................. and ..............................

**(B)- Mention the importance of each:**

1- Nitrogen gas.

......................................................................................................

2- Hoffman Voltmeter.

......................................................................................................

3- Coulomb Meter.

......................................................................................................

4- Penicillium notatum fungus:

......................................................................................................

======================================

**Third Question : -(A)- Correct the underlined words:**

1- The element <u>potassium</u> is symbolized by the symbol **P**. ( ......... )

2- The valence of an element can be known from the number of <u>protons</u> in the outer energy level. ( ......... )

**(B)- What is the result of:**

1- There are gravitational forces between the Earth and the Moon.

.................................................................................................................

2- A positively charged rod of glass is brought close to a freely suspended rod of ebonite with a negatively charged.

.................................................................................................................

3- The genetic material in the paramecium is surrounded by a nuclear membrane that separates it from the cytoplasm.

.................................................................................................................

4- Part of the Moon is located in the penumbra of the Earth.

.................................................................................................................

==================================

**Forth Question : -(A)- Choose the odd word, then write the relationship between the rest of the words:**

1- Elastic forces - Collision forces - Gravitational forces - Frictional forces.

.................................................................................................................

2- Iron - Copper - Nickel - Cobalt.

.................................................................................................................

**(B)- Compare between : -**

| P.O.C. | Human | Fish |
|---|---|---|
| Respiratory organ | | |
| Medium of oxygen-getting from | | |

| P.O.C. | Venus planet | Uranus planet |
|---|---|---|
| Atmosphere | | |
| Volcanic activity | | |

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| 14 | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer:**

1- Which two elements locate in the same period in modern periodic table

a)- $^{39}_{19}K$ and $^{12}_{6}C$ b)- $^{30}_{15}P$ and $^{23}_{11}Na$ c)- $^{12}_{6}C$ and $^{28}_{14}Si$ d)- $^{39}_{19}K$ and $^{7}_{3}Li$

2- All the following are physical properties of a piece of calcium bicarbonate except it

a)- is solid b) does dissolve in water

c) is white substance d) produces a gas bubbles with vinegar

**(B)- Compare between each of the following:**

| P.O.C. | 1) | S - block | p- block |
|---|---|---|---|
| Number of groups | | | |
| | 2) | Mercury | Earth |
| Volcanic activity | | | |
| | 3) | Water molecule | Nitrogen molecule |
| Type of bond | | | |
| | 4) | Adult frogs | insects |
| Respiratory organs | | | |

======================================

**Second question:-(A) Write the scientific term:**

1- Seasons in which the northern end of Earth s axis neither leans close to nor away from the sun. (.................................)

2- Disease causes increasing temperature of human body to reach $40^0C$ , headache , flatulence , stomach and muscle pain. (.................................)

**(B)- Give reason for each of the following:**

1- Sodium element $^{23}_{11}Na$ forms cation , but chlorine atom $^{35}_{17}Cl$ forms anion during chemical reaction

..........................................................................................

2- Mass of the atom concentrated in the nucleus

..........................................................................................

3- The weight of an object become zero in outer space

..........................................................................................

4- Green algae and plants are called producers

..........................................................................................

======================================

**Third question : -(A)- Complete:**

1- An element (X) has a nucleus contains 20 neutral particles and 39 nucleons so number of negative charges ................................... and its symbol by Z and A is .....................................

2- An element locates in period two and number of electrons in the outer level double the electrons in the first level so its atomic number ................................. and its type ...................................

**(B)- Answer the following:**

1- gold / cobalt /copper / silver / steel [classify according to types of magnetic materials]

.............................................................................................................

2- beans / mushroom / amoeba / euglena / yeast [classify according to type of their cells]

.............................................................................................................

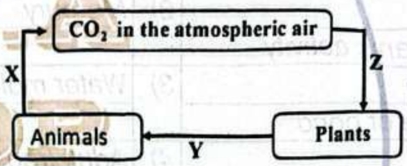
3- In the following diagram

Which of the Biological process:

X.......................................................

Y.......................................................

Z.......................................................




4- Why does not an eclipse occur every month during the full Moon phases?

.............................................................................................................

==========================================

**Fourth question : - (A)- Put (√) or (X):**

1- An object weight is 600 N at the base of a high mountain so its mass and weigh at the top of this mountain equal 6o Kg and 598 N. (   )

2- Electroscope is used to identifying the type of charge on the charged object. (   )

**(B)- Mention one function (or important) for each:**

1) Xylem tissue.

.............................................................................................................

2) Penicillin.

.............................................................................................................

3) A sundial.

.............................................................................................................

4) Rotation of the Earth around its axis in front of the Sun.

.............................................................................................................

| Model Exam ֍ 15 ֍ | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A)- Choose the correct answer:**

1 - An atom ..................... in which the number of protons is half the number of neutrons.

a - $^{1}H_{1}$ b - $^{1}H_{2}$ c - $^{3}H_{1}$ d - $^{16}O_{8}$

2 - The two groups (1A and 2A) are from the elements found in ..................................... block.

A-s B-p C-d D-f

**(B)- Give reason for the following:**

1- Organic compounds are known as carbon compounds.

.................................................................................................

2- The bond in the hydrogen molecule is single covalent.

.................................................................................................

3- The weight of an object on the surface of the moon is less than its weight on the surface of the earth.

.................................................................................................

4- Paramecium is considered an eukaryote.

.................................................................................................

===========================================

**Second question : -(A)- Complete the following statements:**

1- Iron is a magnetic material while ........................................... and ................................... are non-magnetic materials.

2- ................................ is called the blue planet while Mars is called the .................................. planet.

**(B)- Mention the importance of each of:**

1- Egyptian blue dye.

.................................................................................................

2- Stainless steel alloy.

.................................................................................................

3- Lightning rod.

.................................................................................................

4- Bronchioles.

.................................................................................................

==========================================

**Third Question : -(A)- Correct the underlined words:**

1. In Moseley's periodic table, elements are arranged in descending order according to their atomic numbers.( ................ )

2. A positive ion is an atom of an element that has gained one or more electrons.( ................ )

**(B)- What are the results of:**

1. Bringing scraps of paper closer to a glass stem that has been rubbed with silk.

..........................................................................................................

2. Plant leaves do not contain chloroplasts.

..........................................................................................................

3. Not keeping yogurt in the refrigerator.

..........................................................................................................

4- The moon falls completely into the Earth's penumbra.

..........................................................................................................

==========================================

**Forth Question : -(A)- Choose the odd word, then write the relationship between the rest of the words:**

1- Lines starting from the North Pole - imaginary lines that do not intersect - has more density at the two poles - lines starting from the South Pole.

..........................................................................................................

2- Mass - volume - weight - gravitational field.

..........................................................................................................

**(B)- Compare between:**

| P.O.C. | Dysentery disease | Typhoid disease |
|---|---|---|
| Causes microbe | | |
| Where the microbe is located | | |

| P.O.C. | Mars planet | Jupiter planet |
|---|---|---|
| Crust | | |
| Atmosphere | | |

| Model Exam | Dakahlia Governorate | Science Prep. One | Time : 2 Hours |
|---|---|---|---|
| ❁ 16 ❁ | Educational Directorate | 1ST Term January 2026 | توجيه عام العلوم لغات |
| | نموذج امتحان الفصل الدراسي الأول / يناير ٢٠٢٦ / الصف الأول الاعدادى | | |
| | ((الاجابة فى نفس الورقة / صفحة واحدة)) | | |

**First question : -(A) Choose the correct answer:-**

1- Which two elements locate in the same group in the modern periodic table

a) $^{39}_{19}K$ and $^{12}_{6}C$ b) $^{30}_{15}P$ and $^{23}_{11}Na$ c) $^{14}_{7}N$ and $^{28}_{14}Si$ d) $^{39}_{19}K$ and $^{7}_{3}Li$

2- Element (X) has a nucleus that contains 33 neutral particles and 60 nucleons so its symbol is ---------

a) $^{60}_{27}X$ b) $^{60}_{33}X$ c) $^{27}_{60}X$ d) $^{33}_{27}X$

**(B):-(1) What is the** period number in which the d – block starts? What name is given to most of its elements?

Period number ................................ name ................................

**(B):- (2) State with explanation**, What the figures 1 ,2 represent :




..................................................

..................................................

..................................................

**(B):- (3) Give reason:**

In some contours a metal rod whose lower end is fixed in a metal plate that buried in the ground while the upper end is pointed is fixed near high building.

..................................................................................

**(B):- (2) Mention two examples of protozoa.**

..................................................................................

====================================

**Second question : -(A)Write the scientific term:**

1- The force that causes a ball to fall from a high position to Earth's surface. ( .................................................. )

2- Month in which the day length can reach 13 hours and 40 minutes. ( .................................................. )

**(B):- (1) Give on function of:**

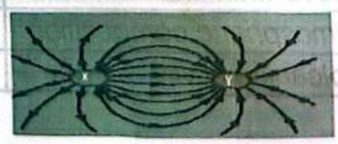
1- Nitrogen..................................................................................

2- Aluminum – titanium alloy. ..................................................................

**(B):-(2) In the opposite shape**

What is the type of charges X and Y

(X) is ..........................................



(Y) is ............................................

**(B):- (3) Write the equation** that represents the cellular respiration process in eukaryotic cells.

.......................................................................................................

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**Third question:- (A)-** Four elements A is alkali metal , B is from 6A group and D is halogen. - **Complete:**

1- molecular formula A with B .................. the type of bond is ..................

2- molecular formula B with D ................ the type of bond is ..................

**(B):-(1) What is meant by** the electric field.

.......................................................................................................

**(B):-(2) Compare between** Xylem and phloem tissue according to their function

a) Xylem .......................................................................................

b) phloem tissue ..............................................................................

**(B):-(2) in the following figure:**



1- What is the name of the region where the moon is located ...................

2- What is the phenomenon is represented by the figure ..........................................................

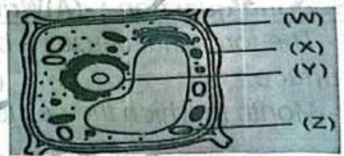
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**Fourth question : - (A)- Cross odd word and write the scientific term of the other:**

1- Copper / silver / cobalt / aluminum. ( .............................................. )

2- Gravitational force / collision force / magnetic force / electrostatic force. ( .............................................. )

**(B):-(1) From the following shape Label:**




W: ............................................................................

X: ............................................................................

Y: ............................................................................

Z: ............................................................................

**(B):-(2) Compare between Mercury and Earth in terms of:-**

a) Atmospheric composition b) Volcanic activity

| P.O.C | Mercury | Earth |
|---|---|---|
| Atmospheric composition | | |
| Volcanic activity | | |

# كيفية طباعة صفحات معينة من ملف معين

## مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

